

TEXAS TECH UNIVERISTY
HEALTH SCIENCES CENTER
Graduate School of Biomedical Sciences

Guidelines and Requirements for Graduate Students

Graduate Program in Pharmaceutical Sciences

I. Program of Study

The Graduate Program in Pharmaceutical Sciences (GPPS) offers a master's and a doctoral degree in Pharmaceutical Sciences. At the time of admission into the GPPS program, all students are subject to the requirements listed in the Texas Tech University Health Sciences Center Student Handbook (Code of Professional and Academic Conduct), the Graduate School of Biomedical Sciences Catalog, as well as the guidelines given below.

II. Program

A. Requirements for Admission into the GPPS:

- All students must complete the Core Curriculum for the Pharmaceutical Sciences Program (approximately 32 hours) including Pharmaceutical Sciences Seminar
- The Graduate Seminar course is mandatory for all students. It must be taken each Fall and each Spring semester. All Graduate Student seminars included in the seminar schedule are mandatory, though some departmental seminars may be attended for extra credit if needed to make up sessions for graduate seminars missed at the discretion of the course director. If a student must miss one of these seminars, they must inform the course instructor immediately with a reason for the absence. Attendance will be monitored by means of sign in sheet.

B. Program Curriculum –

- Program Curriculum, PhD **For more in depth description of the courses, please see the [GSBS Catalog](#)**
- A minimum of 72 hours (48 Didactic, 12 Research, and 12 Dissertation) of graduate work are required for the PhD.

| PhD Current Curriculum |
|---|
| GSBS 5101 Responsible Conduct of Research (1) |
| GPSC 5230 Experimental Design and Biostatistics (2) |
| GPSC 5250 Applied Medicinal Chemistry (2) |
| GPSC 5349 Pharmaceutics (3) |
| GPSC 5404 Principles of Drug Structure and Action (4) – Prerequisite: Biochemistry |
| GPSC 5410 General Biochemistry (4) |
| GPSC 5429 Basic Pharmacokinetics (4) |
| GPSC 5435 Physiology-based Pharmacology (4) – Prerequisite: Principles of Drug Action |
| GPSC 7101 Pharmaceutical Sciences Seminar (1 ea semester of enrollment) (8 hrs) |

- Ph.D. candidates must complete the Core Curriculum for the Pharmaceutical Sciences Program. Ph.D. students must take an additional 16 hours (minimum) of elective didactic course work to complete the 48 hours of required didactic courses. Students will be allowed to take a maximum of 3 credit hours of Independent Study for didactic credit in place of an elective after their first two years of study have been completed.
- Per GSBS requirements, all PhD students must have published an original peer-reviewed first author research publication prior to scheduling their defense. The manuscript must be in a peer-reviewed journal that is indexed by PubMed or Web of Science. Please see the [GSBS Catalog](#) for any exceptions to this policy.
- Students who are assigned to a lab for their doctoral research will be allowed to take additional rotations outside of their assigned lab for didactic elective credit. But this rotation must be approved by the student's advisor. A rotation within the assigned lab is considered research and would not count toward didactic credit

Sample Degree Plan, PhD

Fall (1st Year)

| Course Number | Course Name | Credit Hours |
|---------------|--|--------------|
| GSBS 5000 | Interprofessional Collaborative Practice | 0 |
| GPSC 5101 | Responsible Conduct of Research | 1 |
| GPSC 5230 | Experimental Design and Biostatistics | 2 |
| GPSC 5098 | Pharm Sci Res Methods | 3 |
| GPSC 5410 | General Biochemistry | 4 |
| GPSC 7101 | Seminar | 1 |
| | Total | 11 |

Spring (1st Year)

| Course Number | Course Name | Credit Hours |
|---------------|-----------------------------|--------------|
| GPSC 5250 | Applied Medicinal Chemistry | 2 |
| GPSC 5349 | Pharmaceutics | 3 |
| GPSC 5404 | Principles of Drug Action | 4 |
| GPSC 7101 | Seminar | 1 |
| | Total | 10 |

Summer (1st Year)

| Course Number | Course Name | Credit Hours |
|---------------|--------------|--------------|
| GPSC 7000 | Research | 6 |
| | Total | 6 |

Fall (2nd Year)

| Course Number | Course Name | Credit Hours |
|---------------|-------------------------------|--------------|
| GPSC 5435 | Physiology-based Pharmacology | 4 |
| GPSC 7101 | Seminar | 1 |

| | | |
|--|--------------|----------|
| | Elective(s) | 4 |
| | Total | 9 |

Spring (2nd Year)

| Course Number | Course Name | Credit Hours |
|---------------|------------------------|--------------|
| GPSC 5429 | Basic Pharmacokinetics | 4 |
| GPSC 7101 | Seminar | 1 |
| | Elective(s) | 4 |
| | Total | 9 |

Summer (2nd Year)

| Course Number | Course Name | Credit Hours |
|---------------|--------------|--------------|
| GPSC 7000 | Research | 6 |
| | Total | 6 |

Fall (3rd Year)

| Course Number | Course Name | Credit Hours |
|---------------|--------------|--------------|
| GPSC 7000 | Research | 3 |
| GPSC 7101 | Seminar | 1 |
| | Elective(s) | 5 |
| | Total | 9 |

Spring (3rd Year)

| Course Number | Course Name | Credit Hours |
|---------------|--------------|--------------|
| GPSC 7000 | Research | 8 |
| GPSC 7101 | Seminar | 1 |
| | Total | 9 |

Summer (3rd Year)

| Course Number | Course Name | Credit Hours |
|---------------|--------------|--------------|
| GPSC 7000 | Research | 6 |
| | Total | 6 |

Fall (4th Year)

| Course Number | Course Name | Credit Hours |
|---------------|--------------|--------------|
| GPSC 8000 | Dissertation | 8 |
| GPSC 7101 | Seminar | 1 |
| | Total | 9 |

Spring (4th Year)

| Course Number | Course Name | Credit Hours |
|---------------|--------------|--------------|
| GPSC 7101 | Seminar | 1 |
| GPSC8000 | Dissertation | 8 |

| | | |
|--|--------------|----------|
| | Total | 9 |
|--|--------------|----------|

- Program Curriculum, MS For more in depth description of the courses, please see the [GSBS Catalog](#)
- A minimum 40 hours (27 Didactic, 7 Research and 6 Thesis) of graduate work are required for the MS. Of the 27 Didactic hours necessary to complete a Master's degree, candidates are required to complete the following Core Curriculum courses:

| MS Current Curriculum |
|--|
| GSBS 5101 Responsible Conduct of Research (1 cr) |
| GPSC 5230 Experimental Design and Biostatistics (2 cr) |
| GPSC 5250 Applied Medicinal Chemistry (2) |
| GPSC 5098 Pharm Sci Res Methods (3 cr) |
| GPSC 5349 Pharmaceutics (3 cr) |
| GPSC 5404 Principles of Drug Structure and Action (4) – Prerequisite: Biochemistry |
| GPSC 5410 Biochemistry (4 cr) |
| GPSC 5429 Basic Pharmacokinetics (4 cr) |
| GPSC 7101 Pharmaceutical Sciences Seminar (4 cr) |

- Any requests for exceptions to the Core Curriculum for the Pharmaceutical Sciences Department as outlined for the M.S. or PhD degree must be submitted to the Graduate Program Director by the student. The Graduate Program Director will make decisions for such requests in consultation with Core Course Team Leaders who will ascertain the student's knowledge of the required material.

Sample Degree Plan, MS

| Fall (1st Year) | Spring (1st Year) |
|---|--|
| Biochemistry (4) | Applied Medicinal Chemistry (2) |
| Responsible Conduct of Research (1) | Pharmaceutics (3) |
| Pharm Sci Res Methods (3) | Principal of Drug Structure and Action (4) |
| Pharm Sci Seminar (1) | Pharm Sci Seminar (1) |
| Total Credits for Semester - (9) | Total Credits for Semester - (10) |

| Fall (2nd Year) | Spring (2nd Year) |
|---|--|
| Experimental Design and Biostatistics (2) | Basic Pharmacokinetics (4) |
| Research (7) | Thesis (6) |
| Pharm Sci Seminar (1) | Pharm Sci Seminar (1) |
| Total Credits for Semester – (10) | Total Credits for Semester - (11) |

C. Major Advisor and Advisory Committee

- In accordance to GSBS Policy the Advisory Committee shall be composed of at least four graduate faculty members, with at least three members from the Pharmaceutical Sciences program.
- The Student Affairs Advocate will meet with all GPPS students once a year to monitor student progress and identify any problems within the program.
- Student committee meetings are mandatory and will be required once a year, without excuse. Scheduling is the responsibility of the student and the mentor. The GSBS office and the Student Affairs Advocate will monitor the committee meetings. The student is required to provide a handout to the mentor and committee at least one week before the meeting that summarizes the goals of the project and details of progress made since the last meeting.
- Committee meeting minutes will be captured using a simple form that the advisor fills in comments indicating student progress/problems. The form captures when a student may begin the dissertation process.

D. Assessment Student Progress

- The student's mentor and advisory committee are responsible for overseeing the student's progress. They will make the most substantive contributions to, and the most important decisions regarding the student's academic career. The committee membership must include at least three Pharmaceutical Sciences members; members of other programs, qualified faculty individuals from other institutions, or qualified professionals are eligible to serve on the committee. Faculty members at other institutions and qualified professional individuals may be approved to sit on an advisory committee once a formal GSBS membership has been properly processed and approved.

E. Qualifying Exam

For the detailed Qualifying Exam time line, please see the [GPPS Qualifying Exam Policy](#).

- Graduate students pursuing a Doctoral Degree in Pharmaceutical Sciences will be administered a Qualifying Examination for Admission to Candidacy. The examination is intended to test the student's ability to apply the scientific process to the study of a specific problem, and will evaluate the student's overall knowledge, comprehension, analysis, synthesis and evaluation. Failure to successfully complete the qualifying examination will be cause for dismissal from the program.
- The Qualifying Examination shall consist of two parts, written and oral, as defined in the GPPS policies. The Qualifying Exam will be administered once a year, beginning in the late spring, to students who have completed the Graduate Program in Pharmaceutical Sciences (GPPS) core curriculum, usually in the spring of their second year of study. The written and oral components must be completed within the timeline detailed in the GPPS guidelines.
- Should a student receive two or more "disapprove to advance to candidacy" ratings, they will discuss the deficiencies with the Grading Committee.

- Upon successfully completing the Oral Qualifying Examination, the Graduate Program Coordinator will submit a request for Admission to Candidacy form to the Dean of the GSBS in Lubbock.

F. Completion of the degree program:

- The GPPS program will follow all GSBS policies and procedures. Additional details on the following are available in the [GSBS catalog](#):
- In addition to the GSBS grade policy, the program reserves the right to terminate any student that receives a failing grade in any course.

Program Director, Abilene: Laurence Wood, PhD
Program Director, Amarillo: Abraham Al-Ahmad, PhD

Helpful links:

[GSBS Student Resource Center](#): (GSBS Academic Calendar, Online Catalog, Student Handbook, etc.)

[GSBS Student Forms Page](#):

[GPPS Web Page](#)

[GSBS Faculty Directory](#):

[GSBS Website](#)

[TTUHSC Institutional Health & Wellness](#)

[TTUHSC International Student Services](#)